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Afterword

Decentring the Smart City

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At the core of this book has been the entwining of imaginaries and equality with respect to present and future cities, particularly their incarnation as smart cities. Collectively the authors have sought to imagine a different kind of smart city, both in terms of how we think about them and their realization. At the heart of this reimagining is equality and a belief that smart cities should serve the interests of all their residents in equal measure. Unsurprisingly, the concepts of power and capital, and the counterpoints of justice, citizenship and democracy, feature prominently in the discussion. Like much of the critical literature on smart cities, the chapters make the case that smart cities as presently conceived and realized predominantly serve the interests of companies and states, which often work in tandem within a neo-liberal framing.

Smart cities are the latest, technology-driven incarnation of entrepreneurial urbanism that recasts the entire urban realm as a market, rather than the urban being a place where markets function (Kitchin 2015; Shelton et al. 2015). Within neo-liberalism what were public infrastructures and services, run by the state for public good, are outsourced, privatized and deregulated, delivered through private, for-profit operators. The state facilitates this marketization of infrastructure and services, and their increasing technocratic nature, through its restructuring and neo-liberal re-orientation and state-sponsored innovation and market creation. Here, rather than act as the sole service provider, the public sector is cast as partner or broker, working in conjunction with or procuring services from the private sector. Bodies such as the EU's European Innovation Partnership on Smart Cities and Communities (EIP-SCC) promote public-private collaboration, actively seeding new marketplaces through funding mechanisms and encourage the creation of living laboratories for the trialling new technologies in order to facilitate adoption (Cardullo and Kitchin 2019b). At the same time, municipalities view the smart cities agenda and the creation of well-managed, forward facing and efficient

_____ 1 and optimized city infrastructures and services as a means to attract inward invest-
_____ 2 ment and talent and drive city-region economic development, competitiveness and
_____ 3 productivity (Shelton et al. 2015; Townsend 2013).

_____ 4 Smart city technologies also have consequences for the state's work, altering
_____ 5 governance practices and shifting the nature of governmentality and citizenship.
_____ 6 Through new technologies such as city operating systems, centralized controlled
_____ 7 rooms, coordinated emergency response systems, digital surveillance, predictive
_____ 8 policing and intelligent transport systems, how populations are managed, services
_____ 9 delivered and infrastructure controlled and regulated has become more techno-
_____ 10 cratic, algorithmic, automated and anticipatory (predictive) (Kitchin 2014). In
_____ 11 turn, governmentality shifts from a disciplinary calculative regime in which people
_____ 12 self-regulate behaviour based on the fear of surveillance and sanction, to control
_____ 13 regimes in which people are corralled and compelled to act in certain ways, their
_____ 14 behaviour explicitly or implicitly steered or nudged through their embedding in or
_____ 15 use of systems (Vanolo 2014). The transformation in the organization and ethos
_____ 16 of government by neo-liberalism and the use of smart city technologies alters the
_____ 17 social contract between the state and citizens. Neo-liberal citizenship moves away
_____ 18 from inalienable rights and the common good towards individual autonomy,
_____ 19 freedom of choice and personal responsibilities and obligations defined largely by
_____ 20 market principles, with checks and balances that seek to limit excessive discrim-
_____ 21 ination and exploitation (Ong 2006). In other words, citizens have choices and
_____ 22 freedoms as long as they have capital to afford them and they comply and behave
_____ 23 as states and markets dictate. Within the smart city then, citizens are largely cast as
_____ 24 consumers, although they can equally be positioned as data points to be exploited
_____ 25 or policed or subjects to be steered, nudged and controlled (Cardullo and Kitchin
_____ 26 2019a). If there is civic engagement, it is in the form of a participant, tester or
_____ 27 player who provides feedback or suggestions, rather than citizens being cast as
_____ 28 active, engaged participants (a proposer, co-creator, decision-maker or leader).

_____ 29 Unsurprisingly, those critiquing smart cities are concerned that their rationale
_____ 30 and deployment is being overly determined by the interests of companies (cap-
_____ 31 ital) and states (power) (Cardullo et al. 2019; Sadowski 2020; Söderström et al.
_____ 32 2014). For-profit systems are inherently underpinned by the logics of capitalism
_____ 33 in which inequalities and discrimination are a built-in design feature for accumu-
_____ 34 lating capital. Smart cities are a key contemporary component of the second cir-
_____ 35 cuit of capitalism, core to property development and a spatial fix for capital. It is
_____ 36 no coincidence that new greenfield cities and large urban regeneration projects are
_____ 37 cast as smart city developments (Coletta et al. 2019; Datta 2015; Wiig 2017). The
_____ 38 technologies themselves enact the logics and practices of platform and surveillance
_____ 39 capitalism, extracting profit through service arrangements with states and the data
_____ 40 of citizens (Sadowski 2020). In the latter case, additional value is accrued through

1 ‘data colonialism’, in which the process of accumulation is achieved by enclosing
2 communal and personal resources, and data dispossession with no remuneration
3 and monetization as a feature of a product or service, control of this exploitative
4 relationship residing with the data extractor. Through the use of data-driven,
5 algorithmic technologies, the surveillance gaze and levels of control are deepened
6 with respect to managing populations, enhancing state power. Smart systems are
7 often differentially focused on managing particular populations (along the lines
8 of race, ethnicity, gender, disability, etc.), automating and deepening inequalities
9 (Eubanks 2017). And in more authoritarian regimes, smart city technologies pro-
10 vide a means to target, track and corral the location, movement and activities of
11 people in fine detail (Liang et al. 2018).

12 As such, while companies and states promote their technologies as being citizen-
13 centric, there is significant scepticism concerning such rhetoric (Kitchin 2015). In
14 general, what is meant by ‘citizen-centric’ is a weak form of stewardship (delivering
15 on behalf of citizens) and civic paternalism (deciding what is best for citizens),
16 rather than citizens being meaningfully involved in the vision and development of
17 the smart city (Shelton and Lodato 2019). Instead, the underlying ethos remains
18 steadfastly neo-liberal, with the notion of ‘citizen-centric’ being an empty signi-
19 fier, giving the impression of participatory intent while the actual structural rela-
20 tions remain firm.

21 The chapters in this book provide a critique of the neo-liberal smart city and
22 its framing and imaginary of the future city. They draw on the ideas and ideals
23 of justice, citizenship and democracy to imagine a smart city that strives for
24 equality and fairness. As with data activism and data justice, they divide into two
25 approaches for realizing their vision – those that seek to recast the smart city,
26 inverting the ethos and use of smart city technologies (e.g. Caldwell, Chapter 7;
27 O’Shea, Chapter 5; Smith et al., Chapter 9), and those that are more oppositional
28 to the notion of smartness and the deployment of smart city technologies (e.g.
29 Dare, Chapter 1; Sledmere, Chapter 10; van Ditmar, Chapter 2).

30 Milan and van der Velden (2016) identify two main classes of data activism.
31 The first, proactive data activism, uses open government data and creates its own
32 datasets to seek political action and social change, co-opting the techniques of data
33 science, states and companies to range back against them. The second, reactive
34 data activism, seeks to challenge, undermine and dismantle present asymmet-
35 rical arrangements of data power and politics through political protest and legal
36 challenge. Similarly, D’Ignazio and Klein (2020) chart the differences between
37 data ethics and data justice. Data ethics aims to make data-driven systems fairer,
38 accountable and transparent. However, it locates the source of ethical issues in
39 individuals and technical systems, and pursues solutions that are procedural in
40 nature (e.g. through data governance structures and legislation). D’Ignazio and

1 Klein (2020) contend that the focus on procedures and compliance works to secure
2 power rather than challenging and transforming it as their components and solu-
3 tions can be captured by vested interests to serve their own ends. Moreover, the
4 solutions pursued deal with symptoms without tackling root causes, curtailing
5 only the worst excesses of data capitalism and data power without fundamentally
6 changing them. In contrast, data justice is organized around a different set of con-
7 cepts – justice, oppression, equity, co-liberation and reflexivity. These concepts
8 locate the source of ethical issues in unequal and uneven structural power and
9 work towards dismantling them and putting in place alternative arrangements.
10 In other words, they challenge data power rather than securing it and are more
11 difficult to co-opt.

12 Most visions of the citizen-centric smart city follow the proactive data activism and
13 data ethics approach. They seek to facilitate the co-option of smart city technologies
14 by citizens and encourage the adoption of regulatory and compliance mechanisms
15 for governing the smart city centred on notions of bias, fairness, accountability and
16 transparency (Kitchin 2016; Townsend 2013). Rather than being oppositional to the
17 smart city and the use of digital technologies to mediate urban life, such an approach
18 is about re-envisioning and orientating the smart city so that they are fair and pro-
19 portionate in their operations. For others, this approach of co-option and regulation
20 reifies existing structural relations, rather than challenging and transforming them
21 (see Cardullo et al. 2019). It places the emphasis on technical and procedural inter-
22 ventions, ignoring the wider neo-liberal political economy and capitalist relations
23 that underpin smart city deployments and sustains inequalities. They posit that there
24 will be no fundamental shift in the inequalities inherent in present visions of smart
25 cities, which will continue to serve primarily the interests of companies and states,
26 without wider political change, therefore the logics and realization of the smart city
27 needs to be opposed and alternative urban visions forwarded.

28 What the latter suggests is the need to decentre the smart city, where decentring
29 ‘is to ‘see through’ technology and position it in relation to systems of oppression,
30 whose norms and values are wired in’ to smart city initiatives (Gangadharan and
31 Niklas 2019: 895). In other words, we need to move away from the reification
32 of technology and how it can be co-opted and regulated, instead situating smart-
33 ness within the wider (re)production of social relations (Gangadharan and Niklas
34 2019). We need to stop casting ‘smartness’ and digital technologies in a privileged,
35 significant independent role and recognize that they are the agents of wider struc-
36 tural forces. This requires us to focus on and imagine the future city in a more
37 holistic sense, and how smartness might or might not be a means of realizing a
38 fairer, more open and tolerant city. Rather than trying to work out how to insert
39 equality into smartness, instead the focus is squarely on equality and reconfig-
40 uring structural relations and figuring out how smart technologies can be used to

1 create equality and equity *in conjunction* with other kinds of interventions, such
2 as social, economic and environmental policy, collaborative planning, commu-
3 nity development, investment packages, multi-stakeholder engagement and so on.

4 The issues facing cities are not going to be fixed through technological
5 solutionism, but a multifaceted approach in which technology is one just one
6 component (Morozov and Bria 2018). Homelessness is not going to be fixed with
7 an app; it requires a complex set of interventions of which technology might be
8 one part, along with health care and welfare reform, tackling domestic abuse
9 and a shift in the underlying logics of the political economy (Eubanks 2017).
10 Congestion is not going to be fixed with intelligent transport systems that seek
11 to optimize traffic flow, but by shifting people from car-based travel to public
12 transit, cycling and walking. Similarly, institutionalized racism channelled and
13 reproduced through predictive policing will not be fixed solely by tinkering with
14 the data and algorithms to make them more robust, transparent and fairer, but
15 by addressing institutionalized racism more generally and the conditions that
16 enable it (Benjamin 2019). In such a decentred perspective, platform and surveil-
17 lance capitalism are not framed as separate and distinct forms of capitalism, and
18 racism expressed through smart urbanism is not cut adrift from the structural
19 logics and operations of institutionalized racism (understood in purely technical
20 and legal terms). Rather, smart city technologies and their operations are framed
21 with respect to capitalism and racism per se, and the solutions are anti-capitalist
22 alternatives and anti-racism in which smart city technologies might or might not
23 play some part.

24 This is not to say that a proactive activism/ethics approach centred on smart
25 city technologies has limited value. The efforts and ideals of civic media, citizen
26 science and citizen-led projects to develop their own and co-opt smart city tech-
27 nologies, along with initiatives to tackle biases and seek fairness, transparency
28 and accountability in corporate and state systems, inherently has utility. But as
29 D'Ignazio and Klein (2020: 61) make clear, they are 'inadequate on their own'
30 to address the injustices enacted and reproduced through smart city initiatives.
31 Instead, they need to be approached in a decentred way, framed in relation to
32 wider structural conditions and coupled with more radical ideas and interven-
33 tions in order to create a more just and equal society. This requires a developing
34 different imaginary for creating equitable cities in which smart technologies
35 play some role rather than necessarily being front and centre. The chapters in
36 this book provide some routes on to this path, but there is much work still to
37 be done.

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